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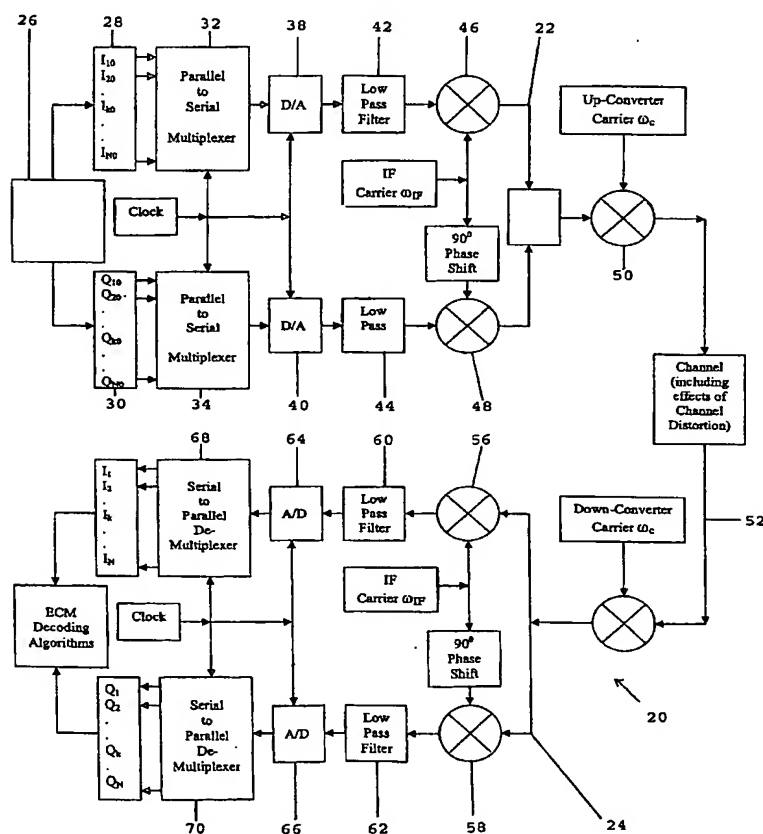
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(54) Title: MULTICARRIER SYSTEM WHEREIN CONTROL DATA IS SUMMED TO INFORMATION DATA



(57) Abstract: A system and method for encoding data for transmission over a telecommunications network. The system and method involve embedding a control data block ( $I_{k0}$ ) within a plurality of real data blocks ( $I_{N0}$ ). Preferably, real data in the real data blocks ( $I_{N0}$ ) is convoluted with at least some of the control data in the control data block ( $I_{k0}$ ). For example, each entry in each real data block ( $I_{N0}$ ) may be phase convoluted with phase angle of the corresponding entry in the control block using an encoding module (26). Once this is done, the real data in the real data blocks and additionally the control data block in the control block is modulated with every sub carrier.

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# INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
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## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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☒ Further documents are listed in the continuation of box C.

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